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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,745	12/08/1998	DANIEL S. SIMPKINS	32172-143271	7213

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EXAMINER

TRAN, PHUC H

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/207,745

Applicant(s)

SIMPKINS ET AL.

Examiner

PHUC H TRAN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-13, 15-20 and 31-40 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 14, 21-26 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 7 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 32 is objected to because of the following informalities: "the shared memory" in line 1 should be rewritten as "the single share memory" as claim 31, line 6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 3-5, 7, 9, 23-25, 27, & 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3-5 & 23-25 recites the limitation "the shared memory" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 7 & 27 recites the limitation "the shared memory" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 9 & 29 recites the limitation "the shared memory" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 8-9, 14, 21-26, & 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosuge et al. (U.S. Patent No. 4575844).

- With respect to claims 1 & 21, Kosuge teaches a switch for switching time division multiplexed data and packet data from input ports to output ports (e.g. Fig. 1 shows the basic system configuration of a digital switching system for circuit and packet through TDM), which comprises: a plurality of input ports receives data (e.g. terminals in Fig. 1), wherein each data comprises either TDM data or packet data (e.g. the line 15 shows the TDM input data in Fig. 1); a plurality of output ports transmits switched data (e.g. terminals in Fig. 1); and a single shared memory (e.g. hierarchical storage in Fig. 1) couples the input ports to the output ports; the shared memory sequentially receives all TDM data and packet data from the input ports (e.g. the shared memory sequences receiving in input line 15); the single shared memory stores both TDM and packet data; the single shared memory switching all sequentially receives TDM and packet data from respective input ports to respective output ports (e.g. the shared memory sequences outputting data on output line 16), wherein switching of packet data by the single shared memory has neither latency nor jitter effect on switching of TDM data by the single shared memory (see col. 1, lines 64-67 and Fig. 5) and wherein switching of TDM data is based on input time slots of the TDM data.

- With respect to claims 2 & 22, Kosuge explicitly fails to teach each data is received by an input port as a time slot in a frame, but it inherently know the TDM comprising time slots, which assigns a fixed number of bits in each frame.

- With respect to claims 3 & 23 Kosuge further teaches the single shared memory, which comprises a TDM data memory portion (e.g. CKT switching call buffer in Fig. 1) and a packet data memory portion (packet switching call buffer in Fig. 1).

- With respect to claims 4 & 24, Kosuge discloses the single shared memory that treats the input ports as logical input ports (e.g. the input port in Fig. 1 as terminals).

- With respect to claims 5 & 25, Kosuge teaches the single shared memory places sequentially received packet data in a queue for a respective output port (e.g. data is received at the switch memory to transmit to the output).

- With respect to claims 6 & 26, Kosuge also teaches the data are received by the input ports and transmitted by the output ports as data exchange units (e.g. the system of Kosuge utilizes the TDM with time frame as exchange unit to transmit data from input to output port).

- With respect to claims 8 & 28, Kosuge explicitly fails to teach the switching of a data from a respective input port to a respective output port is controlled by a stored switch configuration, but it is inherently to know the control section 14 in Fig. 1 for control the switching of data from input to output.

- With respect to claims 9 & 29, Kosuge also teaches an input data router sequentially routing data from the input ports to the single shared memory; and an output data router sequentially routing data from the shared memory to the output (e.g. Fig. 1 shows the sequentially routing data from the input to the shared memory and to the output).

- With respect to claims 14 & 30, Kosuge discloses wherein the data are received by input ports and transmitted by the output ports as data exchange units (e.g. the system of Kosuge as exchange unit to transmit data from input to output port). The data exchange units for packet

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data comprise routing information (e.g. the digital switching units 10 in Fig. 1 are for routing information from one terminal to another). The stored switch configuration uses the routing information of data exchange units for packet data to determine respective output port to switch the data exchange units (e.g. the control section is for controlling and routing the information through the digital switch unit). Kosuge explicitly fails to disclose the switching of a data exchange unit from a respective input port to a respective output port is controlled by a stored switch configuration, but it inherently understands the control section 14 in Fig. 1 for control the switching of data from input to output.

Response to Arguments

6. Applicant's arguments with respect to claims 1-6, 8-9, 14, 21-26, & 28-30, have been considered but are moot in view of the new ground(s) of rejection.

- It's noted in Applicant's remarks indicated that the memory in Kosuge is not a single shared memory, switching all TDM data and packet data, storing both TDM data and packet data, switching data based on input time slots and avoiding the latency and jitter effect.

Examiner respectfully disagrees with Applicant. Kosuge teaches a single shared memory as Hierarchical storage, which has many portions such as small, large capacity memory and file memory; therefore, the hierarchical storage is considered as the single shared memory for storing data. Kosuge also teaches the digital switching system 10 in Fig. 1 is for circuit switch and packet switch with avoiding the latency (see col. 1, lines 64-67).

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Allowable Subject Matter

7. Claims 10-13,15-20,31-40 are allowed.
8. Claim 7 & 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9314.

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
January 15, 2003


DANG TON
PRIMARY EXAMINER